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```
/*Write a complete Programe in PROLOG Languageto find
factorial/*
domains
A=integer.
database
predicates
fact(A,A)
clauses
fact(0,1):- !.
fact(N,F):-N1=N-1,fact(N1,F1),F=N*F1.
goal
```

```
*/Write a complete Programe in PROLOG Language to f
ind power /*
domains
A=integer.
database
predicates
power(A,A,A)
clauses
power(_,0,1):-clearwindow ,!.
power(X,Y,P):-clearwindow,Y1=Y-
1,power(X,Y1,P1),P=P1*X.
goal power(2,4,P),write(P).
```

```
/*Write a complete Programe in PROLOG Language
to find result of this seqence S=1+2+3+...+N( i put
 end =5 of sequence you can change this range) */
domains
A=integer.
S=integer.
database
predicates
sum(A,S)
```

```
clauses
sum(0,0):-clearwindow ,!.
sum(X,S):-clearwindow,
X1=X-1,sum(X1,S1),S=S1+X.
goalsum(5,S),write(S).
```

```
*/Write a complete Programe in PROLOG Language to f
ind result of this seqence S=1+3+5+...+N( i put end
 =5 of sequence you can change this range)*/
domains
A=integer.
S=integer.
database
predicates
sum(A,S)
clauses
sum(1,1):-!.
sum(X,S):-clearwindow,X1=X-2,sum(X1,S1),S=S1+X.
goal sum(5,S),write(S)
```

```
/*Write a complete Programe in PROLOG Language to f
ind result of this seqence S=2+4+6+...+N( i put end
 =6 of sequence you can change this range)
domains
A=integer.
S=integer.
database
predicates
sum(A,S)
clauses
sum(0,0):-clearwindow ,!.
```

```
sum(2,2):-!.
sum(X,S):-clearwindow,X1=X-2,sum(X1,S1),S=S1+X.
goal sum(6,S),write(S).


/*Write a prolog programe to print
 a contents of list */

 domains
 L=integer*.
database
 predicates
 printlist(L)

 clauses
 printlist([]):-!.
 printlist([H|T]):- write(H),nl,printlist(T).

 goal
 printlist([1,3,4,6,7,8,0]).


/*Write a prolog programe to print
 the sum of list*/



*/

 domains
 L=integer*.
 S=integer.
database
 predicates
 sum(L,S)
```

```
clauses
sum([],0):-!.
sum([H|T],S):-write(H),nl, sum(T,S1),S=S1+H.

goal
sum([3,4,7,4,0],D),write("result is ",D).
```

```
/* code to copy contents of list to an other*/
domains
L1,L2=integer*.
predicates
copy(L1,L2).
clauses
copy([],[]):-!.
copy([H1|T1],[H1|T2]):- copy(T1,T2).
```

```
/* code to add element in front of  list */
domains
I=integer*.
E=integer.
predicates
addb(E,I,I).
clauses
addb(X,I,[X|I]).
```

```
/* code to add element in the last of  list */
domains
I=integer*.
E=integer.
predicates
addl(E,I,I).
```

```
clauses
addl(A,[],[A|[]]) :-!.
addl(A,[H|T1],[H|T2]):-addl(A,T1,T2).


/* code to delet the last element in input list*/
domains
I=integer*.

predicates
del(I,I).
clauses
del([X|[ ]],[]):-!.
del([H|T1],[H|T2]):- del(T1,T2).


/* code to concate the two input list L3=L1+L2*/
domains
L1,L2,L3=integer*.
predicates
conc(L1,L1,L1).
clauses
conc([],L,L):-!.
conc([H1|T1],L2,[H1|T3]):- conc(T1,L2,T3).
```